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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,016	03/10/2004	Francois Le Bourhis	06028.0045-00	2658

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EXAMINER	
SOROUSH, ALI	
ART UNIT	PAPER NUMBER
1616	

MAIL DATE	DELIVERY MODE
07/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/796,016	LE BOURHIS ET AL.	
	Examiner	Art Unit	
	ALI SOROUSH	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9 and 11-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-9 and 11-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement of Receipt

Applicant's response filed 03/26/2008 to the Office Action mailed on 09/28/2007 is acknowledged.

Status of the Claims

Claims 2, 3, and 10 are cancelled and claims 1, 4, 11, 12, 17, 30, 31, and 32 are currently amended. Therefore, claims 1, 4-9, and 11-32 are currently pending examination for patentability.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

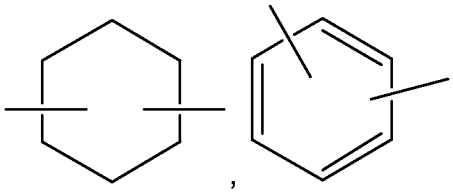
1. Claims 1-28 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sturla et al (US Patent Application 2001/0051135 A1, Published 12/13/2001) in view of Ashton et al (US Patent 6350433 B1, Published 02/26/2002).

Applicant Claims

Applicant claims a aerosol device comprising a cosmetic composition comprising a polyurethane in a cosmetically acceptable medium comprising water and an organic solvent and a propellant comprising dimethyl ether and at least one C_3- C_5 hydrocarbons. Applicant further claims a method for shaping and/or holding a hairstyle and a hair lacquer using the aforementioned aerosol device.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Sturla et al. teaches aerosol device comprising a polyurethane and/or polyurea multiblock polymer in cosmetically acceptable medium. (abstract). "The polyurethane and/or polyurea compounds of the polymer can having repeating base unit corresponding to the general formula (I): -X-B-X-CO-NH-R-NH-CO- in which: X represents O and/or NH, B is a divalent … radical chosen from aromatic alkylene radicals, and C_1 to C_{20} aliphatic radicals, and C_1 to C_{20} cycloaliphatic radicals. In certain embodiments, radical B is a C_1 to C_{30} radicals …" (See paragraph 0031 – 0036). "The radical R can be chosen from the radicals corresponding to the following formulae:



…" (See paragraph 0037). "In certain embodiments, radical R is chosen from hexamethylene, 4,4'-biphenylenemethane, 2,4- and/or 2,6-tolylene, 1,5-napthylene, p-phenylene and methylene-4,4-bis-cyclohexyl radicals, and the divalent radicals dervided from isophorone." (See paragraph 0039). In accordance with the invention a polyurethane and/or polyurea comprising a polysiloxane for

example "the formula (II): X-P-X-CO-NH-R-NH-CO- in which: P is a polysiloxane segment, X represents O and NH, and C_1 to C_{20} aliphatic radicals, and C_1 to C_{20} cycloaliphatic radicals. In certain embodiments, radical B is a C_1 to C_{30} radicals …" (See paragraph 0040 and 0041). Sturla et al. teaches that polyurethane can be added to the total weight of the composition in an amount between 0.1 and 20%, preferably between 2 and 8%. (See paragraph 0062). The amount of organic solvent (i.e. ethanol) can be added in amount between 7.5 to 70% by weight. (See paragraphs 0063 and 0064). The total amount of propellant added to the composition can be between 15 and 85%, preferably between 25 and 60%, and most preferably between 30 and 50%. (See paragraph 0065). The propellant can comprise fluoro or non-fluoro hydrocarbons, dimethyl ether and mixtures thereof. (See paragraph 0066). The composition can further include cosmetic additives including thickners, antiperspirants, surfactants, and vitamins. (See paragraph 0067). A preferred example of the device containing the following composition: 4% lactic acid/ethylene glycol P (MIS-EG) dimethylolpropanoic acid (DMPA) –isophorone diisocyanate polyester, aminomethylpropanol, 15% ethanol, 35% dimethyl ether, q.s. 100% demineralized water. (See paragraph 0071). Sturla et al. further teaches a process for shaping or maintaining a hairstyle comprising using the use of this aerosol device. (See paragraph 0011). "Yet another subject the invention relates to the use of this device for the manufacture of a lacquer or an aerosol spray." (See paragraph 0012).

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Sturla et al. lacks a teaching of a propellant comprising both dimethyl ether and at least one C_3- C_5 hydrocarbons. Ashton et al. cure the deficiency.

Ashton et al. teaches an autophobic hair spray composition comprising film forming resin such as carboxylated polyurethanes, propellant, and autophobic hair spray additive. (See title and column 2, Lines 64-65). "The hairspray resin employed in the composition of the present invention should be capable of forming a film and holding the hair of the user in place …" (See column 2, Lines 15-17). "Compositions of the present invention include water. Typical water levels for an ethanol-based aerosol fixing spray are from 2 to 10%, usually about 2 to 6% by weight." (See column 6, Lines 30-32). The composition can further include an adjuvant such as ceramides. (See column 7, Lines 21-39). Ashton et al. further teaches that propellant is a mixed propellant of dimethyl ether and hydrocarbone selected from isobutane, n-butane, propane, and mixtures. (See column 3, Lines 64-67 and column 4, Lines 1-2). "The amount of propellant will range 3 to 50%, preferably from 5 to 45%, optimally from 25 to 45% by weight total composition. Weight ration of total hydrocarbon to dialkyl ether will range from 5:1 to 1:10, preferably from 2:1 to 1:5, more preferably from 1:1 to 1:4, optimally about 1:2 by weight." (See column 4, Lines 9-11).

Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to one of ordinary skill in the art to combine Sturla et al. with Ashton et al. One would have been motivated to do because Sturla et al. teaches that a mixture of propellants may be used for delivering a polyurethane composition. Further, Ashton et al. teaches a composition that comprises carboxylated

polyurethanes for hair fixing. For the foregoing reasons the instant device would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Response to Applicant's Arguments

Applicant argues that the combined references of Sturla et al. and Ashton et al. do not teach that, "these formulations may not allow a gentle spray to be generated" and that there is no motivation found in either Sturla et al. and Ashton et al. to arrive at such a modification. Applicant's arguments have been fully considered and found not to be persuasive. Applicant's claims are not directed in any way to a gentle spray and therefore such an argument is moot. Both Ashton et al. and Sturla et al. teach a hair spray composition being dispensed from an aerosol device. Sturla et al. teach that a mixture of propellents including diemthyl ether and non-florocarbons can be used. Ashton et al. teach a single phase system can be achieved through the use of a mixture of propellents, exemplified by propane, isobutane and dimethyl ether. (See column 1, Lines 58-64). Therefore, if one wanted to impart a similar single phase hair spray composition to the composition of Sturla et al. one would have been motivated to use the propellent mixture taught by Ashton et al. For the foregoing reasons, the rejection of claims 1-28 and 30-32 under 35 U.S.C. 103(a) **is maintained**.

2. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sturla et al (US Patent Application 2001/0051135 A1, Published 12/13/2001) in view of Ashton et al (US Patent 6350433 B1, Published 02/26/2002) further in view of Carballada et al. (US Patent 6703008 B2, Published 03/09/2004).

Applicant Claims

Applicant claims a aerosol device comprising a cosmetic composition comprising a polyurethane in a cosmetically acceptable medium comprising water and an organic solvent and a propellant comprising dimethyl ether and at least one C_3- C_5 hydrocarbons. The composition further comprises panthenol. Applicant further claims a method for shaping and/or holding a hairstyle and a hair lacquer using the aforementioned aerosol device.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Sturla et al. and Ashton et al. are disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

The combined teaches Sturla et al. and Ashton et al. lacks a teaching of a panthenol as additional vitamin. Carballada et al. cure the deficiency.

Carbadalla et al. teaches an aerosol hair spray composition comprising combinations of silicone-grafted copolymers. (See title). The hair spray optionally includes conditioning agents that would modify hair feel including vitamin B preferably panthenol. (See column 12, Lines 57-66).

Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to one of ordinary skill in the art to combine Sturla et al. and Ashton et al. with Carballada et al. One would have been motivated to do because Sturla et al. teaches that a composition that can include a vitamin. One would be motivated to add panthenol because it would provide the hair spray of Sturla et al. with a conditioning agent that would give a better hair feel. For the foregoing reasons

the instant device would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Response to Applicant's Arguments

Applicant re-iterates the same arguments from above. Therefore, Examiner response is disclosed above. For the foregoing reasons the rejection of claim 29 under 35 U.S.C. 103(a) **is maintained**.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush
Patent Examiner
Art Unit: 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616